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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,728	10/27/2000	Uwe Konig	34651-00404USPT	6173

38065 7590 04/20/2004

ERICSSON INC.  
6300 LEGACY DRIVE  
M/S EVR C11  
PLANO, TX 75024

EXAMINER

BLOUNT, STEVEN

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/698,728

**Applicant(s)**

KONIG ET AL.

**Examiner**

Steven Blount

**Art Unit**

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-17 is/are rejected.
- 7) ☒ Claim(s) 13 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4,5.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 9 is objected to because of the following informalities: in line 6, the examiner believes the comma should be removed and placed after the word VCI in line 7 instead.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 12 and 14 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants Admitted Prior Art (hereinafter referred to as AAPA) in view of either one of “The Concept of Virtual Paths and Virtual Channels in ATM-Networks” by Schneider (1990); or, in the alternative, European Patent Application EP 910224 to Nishikado.

With regard to claim 1, AAPA teaches that it is well known to take an ATM cell with a given VPI/VCI identifier and swap (ie, “perform an operation”) this value for an outgoing VPI/VCI identifier based on a tabulated set of incoming VPI/VCI values stored in a table in the node’s memory, wherein the table is searched until the “given VPI/VCI identifier” matches up with a second, “tabulated, incoming VPI/VCI” value (page 3, lines 2+ of the specification. See page 4, third paragraph and also page 5, third paragraph).

AAPA does not however teach storing the VPI/VCI value of the cell in a memory, or searching a "plurality of subtables simultaneously".

In Schneider, page 66, right hand column, last line, it is stated that "The evaluation of the VCI and VPI fields forms an address into a special look-up table". The examiner believes that one of ordinary skill in the art would recognize that evaluating VCI and VPI fields in this manner is done while stored in a memory. Further, Schneider also teaches, on page 67, right hand column, line 6, that the VPI/VCI table is searched in "blocks" within the CAM: "To build blocks within the CAM to search one place after another. The search is done in parallel for all blocks. This seems to be a feasible solution for building up a CAM with the required searching speed".

Likewise, in Nishikado, in column 21, lines 28+, it is stated that the packet is temporarily stored in "memory" (connection identifier transformation mechanism 5, see figure 2), and that the switch table 4 has a pair of VPI/VCI used as the identifying values in the table (connection identifiers) as described in col 2, lines 45+, and that parallel searching is performed (col 24 lines 8+).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have searched the VPI/VCI table of AAPA for the VPI/VCI value located in the ATM cell and temporarily stored in a computer memory by subdividing the table and then searching the subtables simultaneously (ie, in parallel), in light of the teachings of either Schneider or Nishikado, in order to provide a faster method of switching the ATM cell.

With regard to claims 2 - 3, note the swapping operation discussed above and in AAPA.

With regard to claims 4 - 5, see the discussion of the computer memory and the swapping operation discussed above.

With regard to claims 6 - 8, note the discussion of the VPI/VCI pairs on pages 5 - 6 of AAPA.

With regard to claims 9 - 12, see the rejections above.


With regard to claims 14 - 17, see the rejections above, and further note the discussion of network nodes and customer premise nodes on page 2 of the specification.

4. Claims 13 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Steven Blount may be reached at 703-305-0319 Monday through Friday between the hours of 9:00 and 5:30.

  
Ajit Patel  
Primary Examiner

SB

  
4/8/04